

Listing of the Claims

1. (Currently Amended) A rotary absorption heat pump ~~that comprises a rotary unit (1)~~
~~that comprises comprising:~~

a rotary unit having an interior, the interior containing a vapour generator-(2), a condenser-(3), an evaporator-(4), and an absorber (5)-that are interconnected to constitute fluid flow trajectories paths for a volatile fluid component and a liquid absorbing it, the vapour generator comprising a heat exchanger that is located within the interior of the rotary unit, the heat exchanger comprising a thermally conductive fluid conduit adapted to receive a heating medium from a heat source external to the interior of the rotary unit

~~the heat pump also comprising heat transmission means for transmitting heat to the vapour generator (2), wherein said heat transmission means comprise a heat exchanger (6) disposed in the rotary unit (1) through which a hot fluid flows, said heat transmission means also comprising adaptor means in order to transfer said hot fluid from a static environment to said heat exchanger (6).~~

2. (Currently Amended) The heat pump according to claim 1, ~~wherein further comprising the heat transmission means also comprise~~

an heating medium static inlet conduit (8) and an heating medium static outlet conduit (9) for the hot fluid that are disposed in the static environment receiving and expelling the heating medium from the rotary unit, respectively, and

an rotary inlet conduit (10) disposed along a rotary axle of the rotary unit and in fluid communication with the static inlet for delivering the heating medium to the heat exchanger and an rotary outlet conduit (11) disposed coaxially to the rotary inlet conduit for receiving the heating medium from the heat exchanger and delivering the heating medium to the static outlet on the rotation axis (12) of the rotary unit, said inlet and outlet conduits (10,11) connecting the inlet and outlet conduits (8,9) of the static environment with the heat exchanger (6), and the adaptor means comprising a rotary seal (7) that links the static environment with the rotation axis (12) of the rotary unit (1).

3. (Currently Amended) The heat pump according to claim 2, wherein the rotary inlet conduit is disposed within the rotary axle, the heat pump further comprising a rotary seal (7) comprises a bushing (13) made of a low friction material disposed between the

~~static environment and the~~ at an end of the rotation axis (12) rotary axle of the rotary unit (1) where the static inlet and the rotary inlet conduit meet.

4. (Currently Amended) The heat pump according to claim 3, wherein the rotary seal comprises a bushing (13) is made of graphite a low-friction material.

5. (Amended) The heat pump according to claim 3, wherein the rotary inlet conduit (10) of the rotation axis (12) is in the interior of the rotary outlet conduit (11), the end of said rotary inlet conduit (10) being located at the end of the rotary axle and connected to the static inlet conduit (8) of the static environment, the rotary outlet conduit connected by a through a hole (17) disposed on the surface of the rotation axis (12) rotary axle to the static outlet, so that the bushing (13) separates the hot fluid that enters the inlet conduit (10) from the hot fluid that exits the outlet conduit (11) the rotary seal separating the heating medium that enters the rotary inlet conduit from the heating medium that exits the rotary outlet conduit.

6. (Currently Amended) The heat pump according to claim 5, wherein ~~said heat pump further comprises a support (14) and bearings (15) that secure the rotation axis (12) the~~ rotary axle is rotationally connected to bearings located on or within a support structure, the heat pump further comprising a and in that heat transmission means also comprise a casing (16) attached to said support (14), said casing (16) comprising the static inlet conduit (8) and the static outlet conduit (9) of the static environment, and the bushing (13) rotary seal being fixed to the an interior of said casing (16).

7. (Currently Amended) The heat pump according to claim 6, wherein said heat pump further comprises a mechanical fastening (18) that prevents the heating medium ~~hot fluid~~ from reaching the bearings (15).

8. (Currently Amended) The heat pump according to claim 1, wherein the heat exchanger ~~[[6]]~~ comprises a spiral pipe, said spiral pipe being corrugated internally and externally.

9. (Currently Amended) The heat pump according to claim 8, wherein the heat exchanger ~~[[6]]~~ is made of nickel-plated copper.

10. (Currently Amended) The heat pump according to claim 1, wherein ~~the~~ at least a portion of the condenser ~~[[3]]~~ is in direct contact with the environment exterior to the rotary unit so that there is direct cooling of the condenser ~~3 through the air of~~ via the exterior environment.